

1. IDENTIFICATION

Product Identifier	Boron Nitride	
CAS Number:	10043-11-5	
Recommended Use:	Industrial Uses	
Restrictions on Use:	Contact manufacturer	
Manufacturer/Supplier:	GNP Graystar 37 John Glenn Dr. Amherst, NY 14228	GNP Graystar 9 Simmonsville Road Bluffton, SC 29910
Emergency telephone number:	716-759-6600	843-815-5600

2. HAZARD(S) IDENTIFICATIONS

Classification of a Substance or Mixture:

Classification according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only according to OSHA GHS regulations within the United States.

May form combustible dust concentrations in air (USA & Canada GHS only)

The substance is not classified as hazardous according to CLP regulation.

Label Elements

Labelling according to Regulation (EC) No. 1272/2008:

The substance is classified and labelled according to the Globally Harmonized System (GHS) within the USA.

This product is not classified as hazardous according to CLP regulation.

Hazard Pictograms: Not regulated

Signal Word:

WARNING

Not applicable within the EU; only applicable for North America

Hazard Statements: (Not applicable within the EU; only applicable for North America):

May form combustible dust concentrations in air (USA & Canada GHS only)

Additional Information:

Read the label and safety data sheet before use. Prevent dust accumulations to minimize explosion hazard. Keep away from all ignition sources including heat, sparks and flame.

Other Hazards:

May form explosible dust-air mixture if dispersed.

There are no other hazards not otherwise classified that have been identified.

Results of PBT and vPvB Assessment

PBT: Not applicable

vPvB: Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description:	Boron Nitride
Main Component:	CAS No.: 10043-11-5 EC Number: 233-136-6

4. FIRST-AID MEASURES

General Information:	No special measures required
After inhalation:	Supply fresh air, consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing.
After skin contact:	Brush off loose particles from skin. Clean with water and soap If skin irritation continues, consult doctor.
After eye contact:	Immediately remove contact lenses if possible. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor
After swallowing:	Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help
Most important symptoms and effects, both acute and delayed:	Coughing Breathing difficulty Nausea in case of ingestion Gastric or intestinal disorders when ingested Diarrhea Vomiting
Indication of any immediate medical attention and special treatment needed	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing Media:	Water spray Foam Carbon Dioxide Gaseous extinguishing agents
For safety reasons unsuitable extinguishing agents:	Water with full jet
Special hazards arising from the substance or mixture:	May form combustible dust concentrations in the air. Formation of toxic gases is possible during heating or in case of fire.
Advice for firefighters:	Wear self-contained respiratory protective device. Wear fully protective suit

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment & Emergency Procedures:	Avoid formation of dust Ensure adequate ventilation Do not breathe dust. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol
Environmental Precautions:	Avoid release to the environment. Damp down dust with water spray.
Methods and Material for Containment and Cleaning Up:	Pick up mechanically. Send for recovery or disposal in suitable receptacles.
Reference to other sections:	See section 7 for information on safe handling. See section 8 for information on personal protection equipment. See section 13 for disposal information

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Use only in well ventilated areas. Prevent formation of dust. Any unavoidable deposit of dust must be regularly removed. Use personal protective equipment as required.
Information about protection against explosions and fires:	Dust can combine with air to form an explosive mixture. Avoid dust cloud formation. Keep ignition sources away. No smoking. Protect against electrostatic charges.

Conditions for safe storage, including incompatibilities:

Requirements to be met by storerooms and receptacles:	Storage area should be dry and well-ventilated. Avoid storage near extreme heat, ignition sources or open flame.
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Information about storage in one common storage facility:	Store away from foodstuffs.
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Specific End Use(s):	No further information available
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs: No further relevant information available.

PNECs: No further relevant information available.

Exposure Controls:

Engineering Measures: No special measures required.

General Protective and Hygienic Measures: The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.
Avoid breathing dust.
Avoid contact with the eyes.
Avoid close or long-term contact with the skin,

Eye/Face Protection: Safety glasses

Skin Protections: Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules.

Respiratory Protection: Suitable respiratory protective device recommended
Particulate mask should filter at least 99% of airborne particles.

Body Protection: Not required under normal conditions of use.

Limitation and Supervision of Exposure into the Environment: Avoid release to the environment.

Risk Management Measures: No further relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Powder
Color	White
Odor	Nearly Odorless
Order threshold	Not determined
pH	Not applicable
Melting/Freezing point	Not determined
Initial Boiling point/Boiling Range	Not determined
Flash point	Not applicable
Flammability	May form combustible dust concentrations in air.
Auto/Self-ignition temperature	Not determined
Decomposition temperature	2204° C (3999° F)
Explosive Properties	Can pose a dust explosion hazard if dispersed in the air.
Upper/Lower explosion limits	Not determined
Oxidizing Properties	Non-oxidizing
Vapor Pressure	Not applicable
Relative density	1.8 – 2.1
Vapor Density	Not applicable
Evaporation Rate	Not applicable
Solubility	Insoluble
Partition coefficient	Not applicable
Viscosity (Dynamic/Kinematic)	Not applicable

Other Information No further relevant information available

10. STABILITY AND REACTIVITY

Reactivity No further relevant information available

Thermal Decomposition / Conditions to be Avoided:	No decomposition if used and stored according to specifications
Possibility of Hazardous Reactions:	Risk of dust explosion if enriched with fine dust in the presence of air.
Incompatible Materials:	No further relevant information available
Hazardous Decomposition:	Nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity:	Based on available data, the classification criteria are not met.
Primary Irritant Effect:	
Skin corrosion/irritant:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Based on available data, the classification criteria are not met.
Respiratory or skin sensitization:	Based on available data, the classification criteria are not met.

Carcinogenic categories

IARC (International Agency for Research on Cancer):	Substance is not listed.
NTP (National Toxicology Program):	Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration):	Substance is not listed.

Probable Routes of Exposure	Ingestion Inhalation Eye contact Skin contact
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Repeated does toxicity:	Long term inhalation of product dust may be harmful.
Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
STOT – single exposure:	Based on available data, the classification criteria are not met.
STOT – repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:	No further relevant information available
Persistence and degradability:	No further relevant information available
Bioaccumulative Potential:	No further relevant information available
Mobility in soil:	No further relevant information available
General notes:	Avoid release to the environment.

Results of PBT and vPvB Assessment

PBT: Not applicable.
vPvB: Not applicable.

Other Adverse Effects:	No further relevant information available
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13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods: The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

Uncleaned Packaging: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

UN-Number
DOT, ADR, IMDG, IATA Not regulated

UN proper shipping name
DOT, ADR, IMDG, IATA Not regulated

Transport hazard class(es)
DOT, ADR, IMDG, IATA
Class Not regulated
Label -

Packing group
DOT, ADR, IMDG, IATA Not regulated

Environmental Hazards:
Marine pollutant: No

Special precautions for User Not applicable

Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code Not applicable

15. REGULATORY INFORMATION

SARA 313 Components: Substance is not listed

SARA 355 Components: Substance is not listed

TSCA Substance is listed

California Proposition 65: Chemicals known to cause cancer: Substance is not listed

Chemicals known to cause reproductive toxicity to females: Substance is not listed

Chemicals known to cause reproductive toxicity in males: Substance is not listed

Chemicals known to cause developmental toxicity: Substance is not listed

Carcinogenic Categories:

EPA (Environmental Protection Agency): I (oral)

IARC (International Agency for Research on Cancer): Substance is not listed

NIOSH-Ca (National Institute for Occupational Safety and Health): Substance is not listed

Canadian Domestic Substance List (DSL):	Substance is listed.
Canadian Ingredient Disclosure list (limit 0.1%)	Substance is not listed

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57:	Substance is not listed
Chemical Safety assessment:	A Chemical Safety Assessment has not been carried out

16 OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviation and Acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service (division of American Chemical Society)
IMDG	International Maritime Dangerous Goods
DNEL	Derived No-Effect Level (REACH)
DOT	Department of Transportation
GHS	Globally harmonized System of Classification and Labeling of Chemicals.
IATA	International Air Transport Association
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent
PBT	Persistent, Bio-accumulable, Toxique
PNEC	Predicted No-Effect Concentration (REACH)
SVHC	Substance of Very High Concern
vPvB	very Persistent and very Bioaccumulative

NOTICE:

This material safety data sheet complements the technical data sheets but does not replace them. The information it contains is based on our present knowledge of the product on the date indicated. It is given in good faith. Users should be warned about the risks associated with using the product for a different purpose than that for which it was developed, and particularly for uses for which we are not qualified to give advice.

These regulatory prescriptions are provided with a view to helping users meet their obligations when using this product. This list should not be considered exhaustive and does not exempt users from ensuring that they are not required to comply with any further prescriptions other than those mentioned above concerning product possession and handling for which they are solely responsible.